

In the Claims:

No claims were amended herein. The claims and their status are shown below.

1. (Previously presented) A method of modifying starch or starch derivatives comprising: introducing a continuous flow of starch substrate, gas and, optionally, one or more reagents, into a reactor, wherein the starch substrate has a moisture content of between 0 and 45% by weight, a residence time in the reactor of between 1 and 60 minutes and is heated to between 50 and 220°C, characterised in that the starch substrate and the gas are introduced into the reactor in opposing directions and in that the reactor has a cylindrical body comprising a rotating shaft upon which is disposed one or a plurality of blades, wherein the one or plurality of blades conveys the starch substrate from an inlet at a first end of the reactor to an outlet at a second end of the reactor.

2. (Previously presented) A method according to claim 1 wherein the blades have a tip speed of between 2 and 30 m/s.

3. (Previously presented) A method according to claim 1 wherein the starch substrate has a moisture content of between 1 and 30% by weight.

4. (Previously presented) A method according to claim 1 wherein the starch substrate is selected from the group consisting of a native starch, a starch derivative, starchy material and mixtures of two or more thereof.

5. (Previously presented) A method according to claim 1 wherein the starch substrate is introduced into the reactor in powder form.

6. (Previously presented) A method according to claim 1 wherein the reagent is selected from the group consisting of a hydrolysing agent, an oxidation agent, an acid, a dextrinisation agent, an alkylation agent, an esterification agent, an etherification agent, a cross-bonding agent and mixtures of two or more thereof.

7. (Previously presented) A method according to claim 1 wherein the reagent is selected from the group consisting of a mineral acid, a peroxide, an oxidising agent and mixtures of two or more thereof.

8. (Previously presented) A method according to claim 1 wherein the one or more reagents are added in an amount between 0.001 and 20% by weight.

9. (Previously presented) A method according to claim 1 wherein the one or more reagents are introduced into the reactor in liquid, powder or gas form.

10. (Previously presented) A method according to claim 1 wherein at least one of the one or more reagents is added to the starch substrate before being introduced into the reactor.

11. (Previously presented) A method according to claim 1 wherein the residence time of the starch in the reactor is between 2 and 45 minutes.

12. (Previously presented) A method according to claim 1 wherein the reaction is maintained at a temperature between 80 and 220°C.

13. (Previously presented) A method according to claim 1 wherein the gas introduced into the reactor is selected from the group consisting of: air, steam, nitrogen, carbon dioxide and a mixture of two or more thereof.

14. (Previously presented) A method of preparing highly soluble starch comprising: introducing a continuous flow of starch substrate, gas, and one or more reagents selected from the group consisting of a mineral acid, a peroxide and an oxidising agent, into a reactor, wherein the starch substrate has a moisture content between 1 and 30% by weight, a residence time in the reactor of between 2 and 45 minutes and is heated to between 80 and 220°C, characterised in that the starch substrate and the gas are introduced into the reactor in opposing directions and in that the reactor has a cylindrical body comprising a rotating shaft upon which is disposed one or a plurality of blades, wherein the one or plurality of blades conveys the starch substrate from an inlet at a first end of the reactor to an outlet at a second end of the reactor.

15. (Original) A method according to claim 14, wherein the reaction is carried out under alkaline conditions.

16. (Previously presented) A method according to claim 14, wherein the highly soluble starch is from 70% to 100% soluble in water having a temperature of no more than 50°C.

17-19. (Canceled)

20. (Previously presented) A method according to claim 1 wherein the blades have a tip speed of between 3 and 25 m/s.

21. (Canceled)

22. (Previously presented) The method according to claim 1, wherein the starch substrate is conveyed from the inlet to the outlet in a continuous, plug-flow type manner.

23. (Previously presented) The method according to claim 1, wherein the reactor has a heated reactor wall, and the starch substrate is heated in that substrate particles of the starch substrate come into contact with the heated wall.

24. (Previously presented) A method of modifying starch or starch derivative comprising:

providing a reactor having a cylindrical body comprising a rotating shaft upon which is disposed a plurality of blades, and an inlet for a starch substrate at a first end and an outlet for the starch substrate at a second end;

introducing a continuous flow of starch substrate, gas and one or more reagents into the reactor, wherein the starch substrate has a moisture content of between 0 and 45% by weight, and wherein the starch substrate and the gas are introduced in opposing directions, and

conveying the starch substrate from the inlet to the outlet by means of the one or plurality of blades, wherein the residence time in the reactor is between 1 and 60 minutes and wherein the starch substrate is heated to between 50°C and 220°C.

25. (Previously presented) A method of preparing highly soluble starch comprising:

providing a reactor having a cylindrical body comprising a rotating shaft upon which is disposed a plurality of blades, and an inlet for a starch substrate at a first end and an outlet for the starch substrate at a second end;

introducing a continuous flow of starch substrate, gas and one or more reagents selected from the group consisting of a mineral acid, a peroxide and an oxidizing agent into the reactor, wherein the starch substrate has a moisture content of between 1 and 30% by weight, and wherein the starch substrate and the gas are introduced in opposing directions, and

conveying the starch substrate from the inlet to the outlet by means of the one or plurality of blades, wherein the residence time in the reactor is between 2 and 45 minutes and wherein the starch substrate is heated to between 80°C and 220°C.